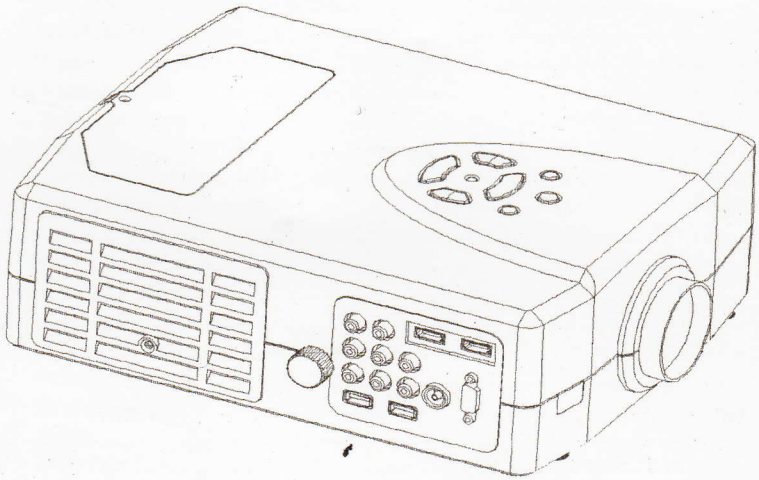
Home Theatre LED Projector



Model No.: CL312A/CL312D

User's Manual

CONTENTS

Warning 3
Safely Precautions 4
Caution 5
Appearance Instruction 6
Top view 6
Bottom view 6
Front view 7
Back view 7
Sides view 8
Installation of projector 9
Full setting 9
Standard setting (front projection) 10
Installation of method 11
Signal connection instruction 12
Operation 13
Open operation 13
Close opera Panel key-press instruct 14
Remote control instruction 15
Image trapezoid adjustment 16
Focus adjustment 16
Keystone adjustment 16
Menu setting method 17
System function operation 17
TV menu 18
Picture menu 19
Option men 20
Audio 20
USB Port 21
USB support 22
Maintenance 23
Filter clearance 23
Cleaning of LCD panel 23
Trouble shooting 24
Specification 25
Accessory 26

WARNING

▲ WARNING:

Please remember the model Number and series number if you need. And please check all accessories when you drop the carton package

MODEL NUMBER:

When you use this projector, please read this manual carefully

Warning:

Do not stare directly into the light of the lens during operation. The intense light beam may damage your eyes, especially for children.

Warning: Do not place the projector in the wet condition, avoid to getting an electric shock

It indicates there is a instruction for important operation

It indicates there is a dangerous voltage

High voltage, do not open it
Except for profession!
WARNING

Safety precautions

▲Warning:

when using this projector ,please read this manual carefully.

If wrong operation, it will cause electric shock or fire. so when use and repair this projector ,please comply with the following points

1,Read manual

Because use this projector, please read full manual carefully and operate according to this manual Instruction.

2, Cleaning instructions:

when cleaning this projector ,please make sure the power cable is unplugged.. Use the wet cloth to clean, not the cleanser.

3, Accessories:

To avoid any damaged to the projector, use accessories enclosed in the package.

4, Environment conditions:

Do not place the projector in wet or moist environment.

5, Installation and fix:

Please place this projector on a stable and leveled areas.

6, Ventilation:

The ventilation in the projector is best for projector work stably. Do not let the dust wall up the filter, or it will cause the projector to overheat and high-temperature protected. Poor heat dissipation will shorten the service life of the projector, and will lead to dangerous. So please rinse he filter monthly.

7, Power:

90 – 240 Volts AC

8, Ground Cable: It is a 3 pin plug.

9, Power cable:

Inspect the power cable before plugging into the power source.

10, Thunder:

When the thunder happen or long time no use, please pull the power cable out of projector.

11, Repairing:

As the high voltage inside, please do not open or try to repair the projector by yourself. Please ask a professional technician refer to the manual or the dealer's advice to repair.

the projector.

12, Far away Heat sensitive device:

please make sure this projector far away other heat device . It will damage the projector service life

Caution

▲About the installation

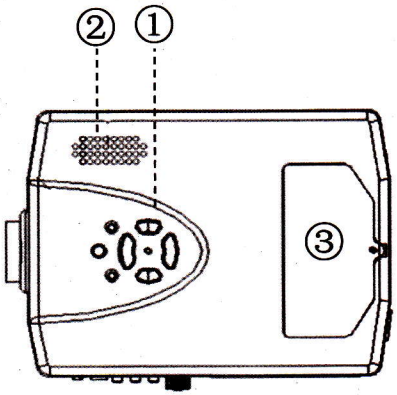
- In order to improve the projector service life, It should not place in a wet, dusty condition.
- Do not put the projector under the sunshine directly
- Projector working temperature:0.c~+60℃
  Projector store temperature: -20.c~+70℃
- Do not block the ventilation-window of projector
  If the projector interior temperature is too hot, the machine will be shut off automatically. This is hot - protected system.
  So please clean the filter of projector monthly. It is very important. Do not let the dust cover the filter.

▲About Opening and closing the projector

- when open the projector ,connect the power cable and press the power" key on the panel .the projector will work ,and the LED lamp will be bright immediately as well.
- when close the projector , press the power key again . And then the lamp shut off.

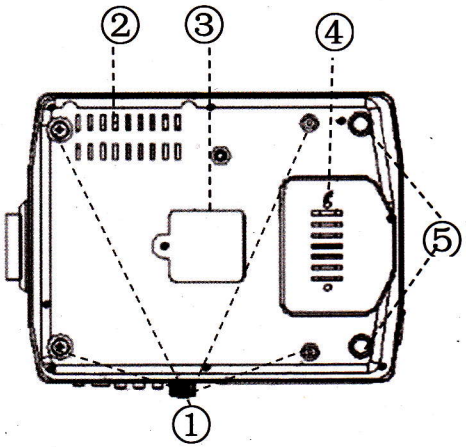
Appearance instruction

▲Top view



1. Panel key-press
2. Speaker
3. compartment cover

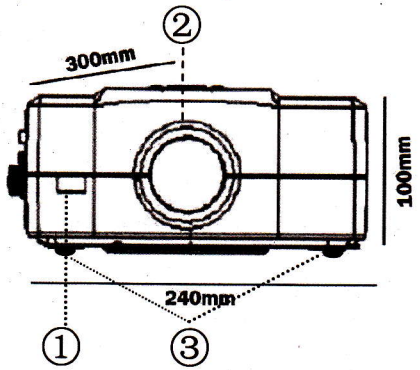
▲Bottom view



1. Holes for ceiling mount;
2. Ventilation window;
3. Bottom Cover;
4. Ventilation window
5. Supporting feet

Note: Please remove the high-feet adjustment(A and B) when ceiling the projector, and the length of the screw rod in position A B C D should not exceed 10mm, to avoid an electric shock when the plastic enclosure is broken and the rod touched the high-tension electricity inside the machine.

▲Front view

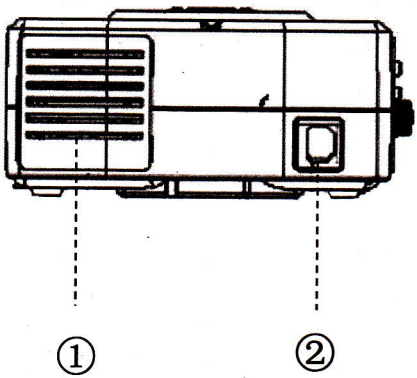


1. Remote sensor;
2. Lens;
3. Supporting feet

Note: 1) When use the remote control, please point this receiver directly;

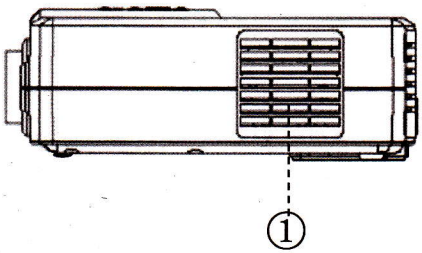
2) Adjust the lens focus to improve the image quality;

▲Back view



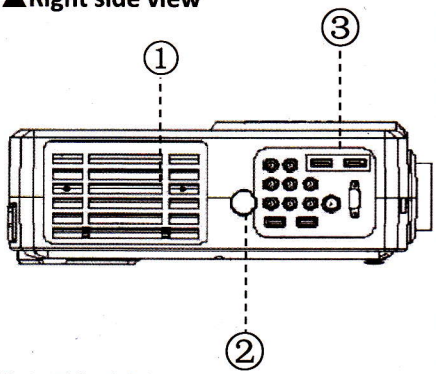
1. Air outlet
2. Power socket

▲Left side view



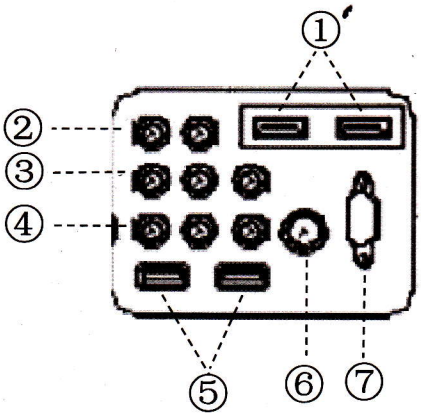
1. Air outlet

▲Right side view



1. Air inlet
2. Keystone
3. Signal interface

Note: This air inlet is very important, do not block it, otherwise, it will burn the projector.

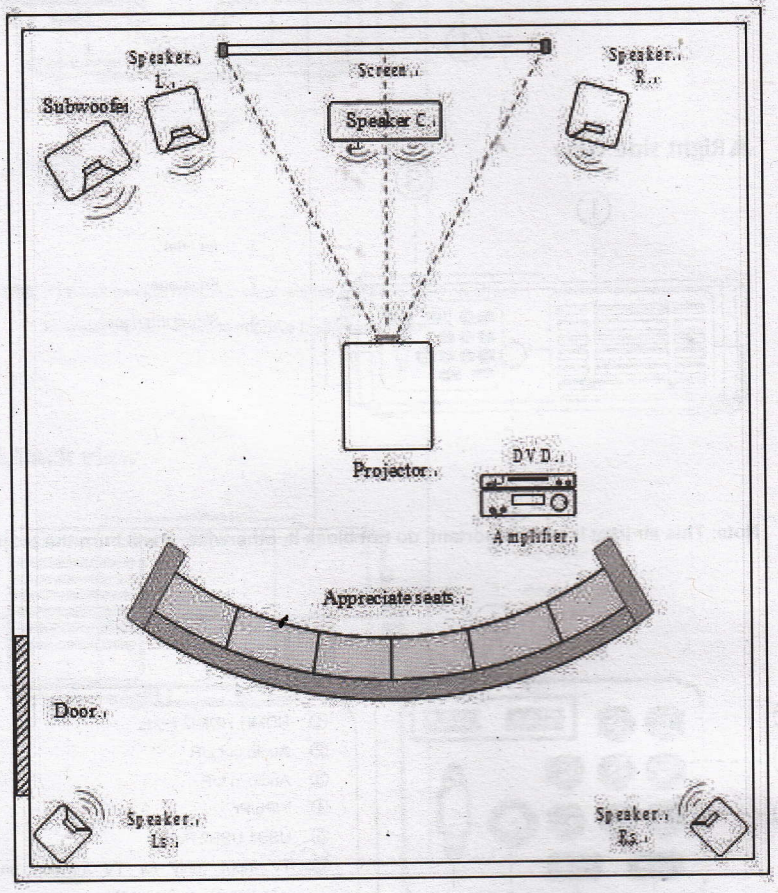


① HDMI1 HDMI2 Ports
② Audio out L/R
③ Audio in L/R
④ Y/Pb/Pr
⑤ USB1 USB2 Ports
⑥ TV input (only for TV function projector) –Analog TV or Digital TV
⑦ VGA input

Installation

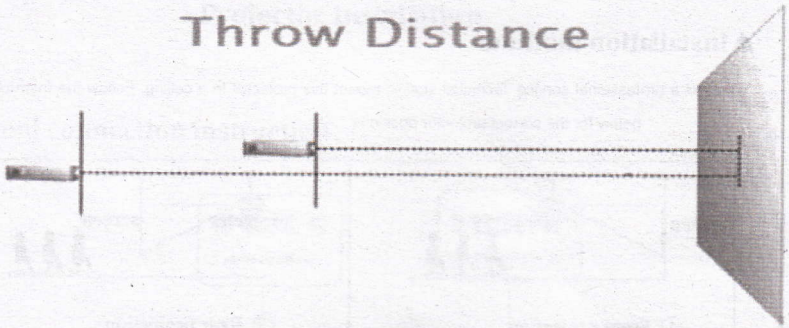
▲FULL SETTING

Please use the setup instruction below:



In order to get good image quality, do not let the sunlight shine the screen directly .If you use the projector in the day time.

▲Standard setting-Front projection

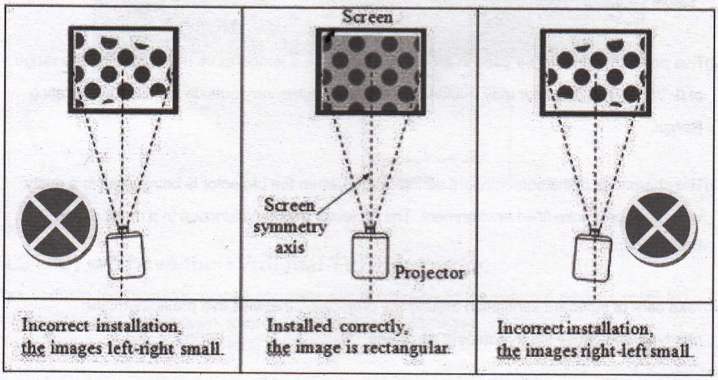


Please refer to the following sheet , adjust your picture size and distance (from the lens to screen)

	4:3	16:9
50''	1.72m	1.87m
72''	2.46m	2.69m
100''	3.38m	3.67m

The data maybe have 3% error, due to the image size according to the distance between projector and screen. Distances may vary from setup to setup, please only use these measurements as a guide and always measure the throw distance before mounting. If the distance is less 2m or over 5m, the image maybe not clear.

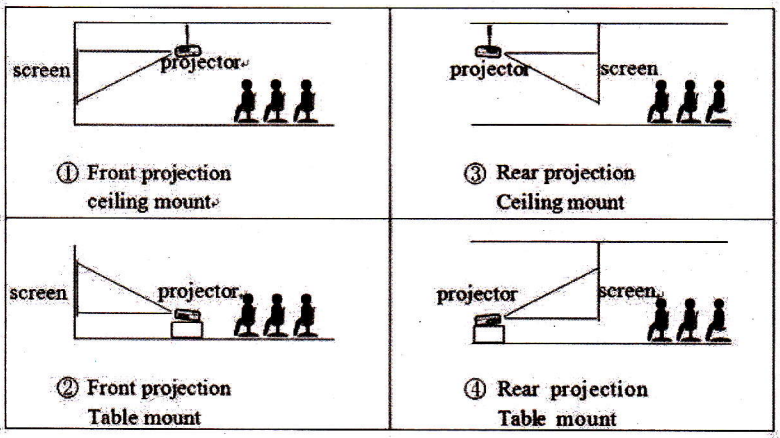
Warning: Please check the following picture to show the trapezoid adjustment.



Projector installation

▲Installation method:

Contact a professional service Technical staff to mount this projector to a ceiling. Follow the Instructions below for the correct projector positions:



Warning:

1) To avoid damaging beyond repair or bodily injury, secure projector mounts firmly to the ceiling or a stable surface.

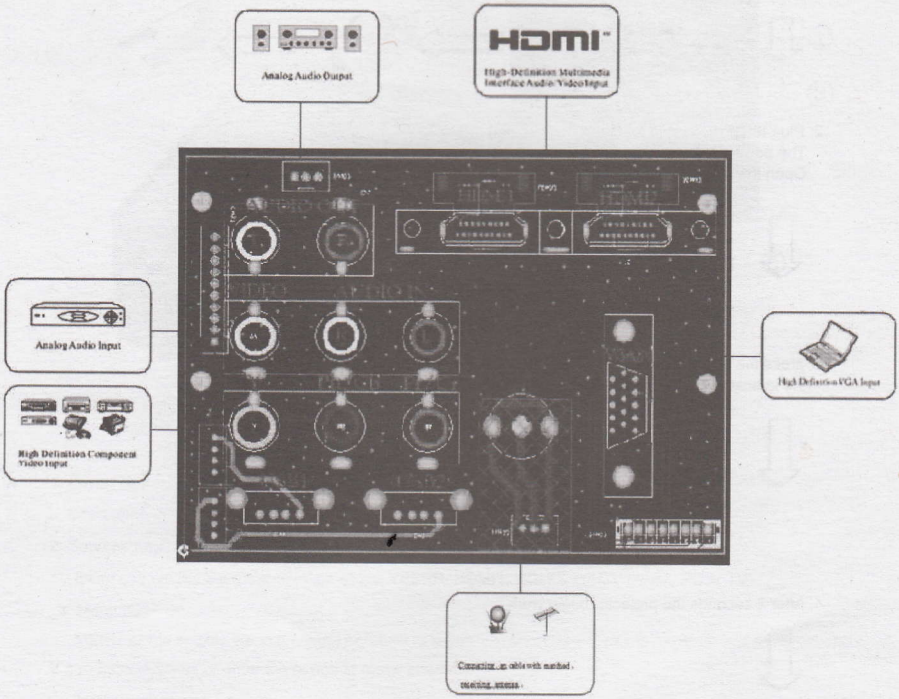
2)This projector can only be used in an environment with a temperature not exceeding the range of 0- 35 ℃ .The projector may malfunction if temperatures vary outside the normal operating Range.

3)The sharpness of the screen might be interrupted when the projector is being used in a dusty, wet, moist or smoke filled environment. The projector might malfunction in a moist or wet Environment.

4)Take care of sufficient ventilation around the projector. Otherwise this projector might overheat and cause life threatening situations

Projector Installation

▲Signal connection instruction



CL312A (CL312D) will have the TV(digital TV) input more.

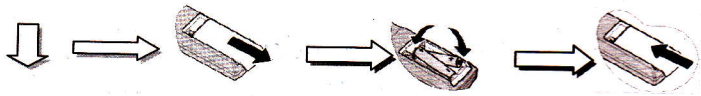
Notice: Before opening the projector, please complete the connection of the external devices (With PC, DVD, etc.) If any device has the power open, may result in equipment damaged.

Basic Operation

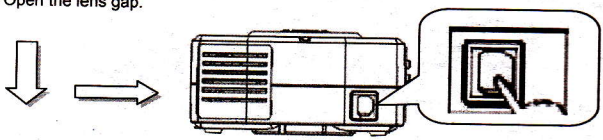
▲Open operation

Notice: If the projector is the new one please read projector "install chapter" placed the projector connect the signal wire and the power wire, the operation as follow:
Before opening the projector, please complete the connection of the external devices (With PC, DVD, etc.)

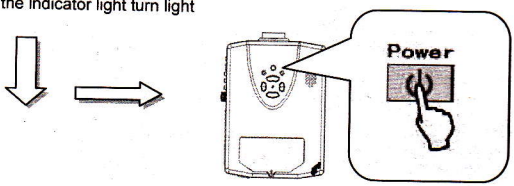
1, Before use the remote. Put in two 7 size batter
Put in two 7 size battery in it



2, Plug the power cable into the power socket.
The power indicator shows red light.
Open the lens gap.



3, press the power key on the remote control or panel
the indicator light turn light



4, After 2 seconds the projector begin work.

5, For the new projector. When the first time to use maybe will appear image unclear or trapezoid distortion, please read image adjustment chapter

6, After the image is clear then you can watch program during watching
you also can setup the system parameter, please read menu setting chapter

▲Close operation

1. During use the projector, press power key can let the projector switch to turn-off. In the meantime, the fan stops and the projector is completely switched off.

If the projector is not to be used for a long time, please proceed to the following procedure.

2. Unplug the projector from the power socket.

3. Reattach the lens cap to the lens

Panel key-press instruction

Panel key-press sketch map

1. Power Key

It can open or close the projector, its function same as the "power" in the remote control.

2. Sources Key

It can choose the input signal (such as AV, YPBPR, HDMI1, HDMI2, USB1, USB2, PC or TV)

3. Menu Key

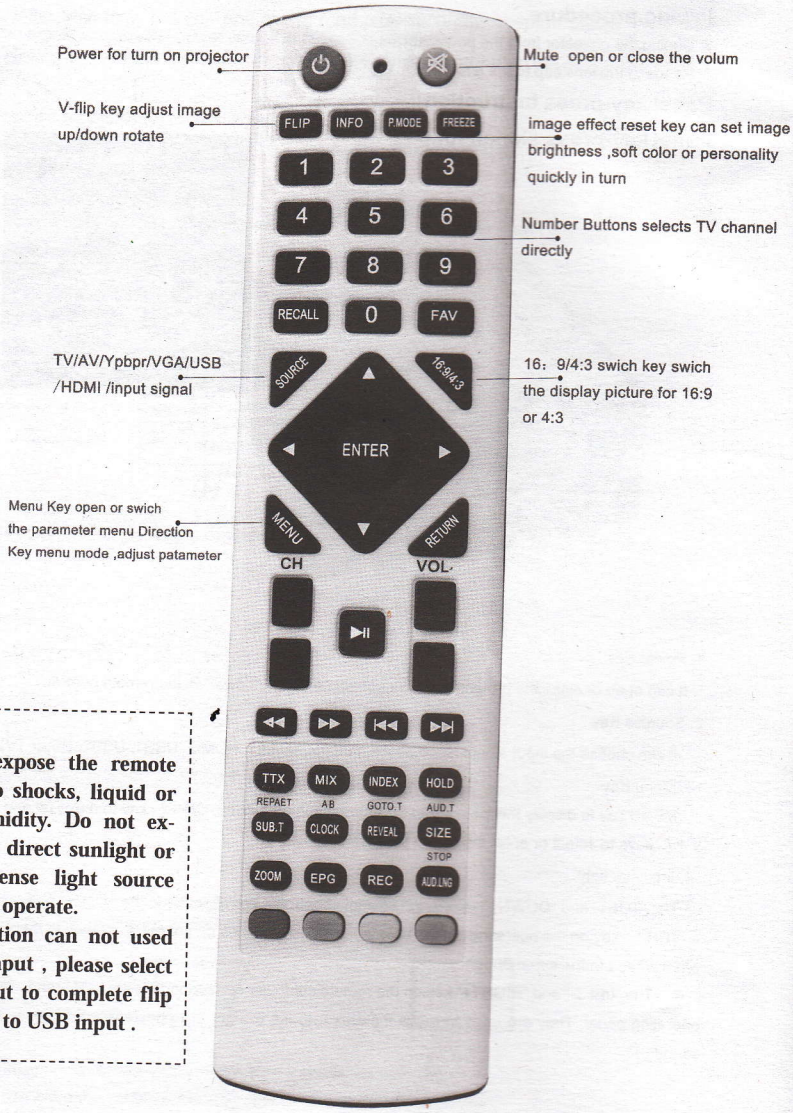
MENU key to display the main menu or return to superior menu, CH + / - key to move up and down options, V + / - keys to select or enter the option to move around.

4. Indicator light

5.The "TOP↑" and "DOWN↓" key on the remote controller corresponds to the "CH+" and "CH-" key on the operating panel. They are used to move the cursor to up or down in the "Function menu window" and in the sub-menus.

6. The "LEFT-" and "RIGHT+" key on the remote controller corresponds to the "V- " and "V+" key on the operating panel. They are used to move the cursor to left or right or to decrease or increase the volume of sound.

▲The remote control keys instruction:



Warning:

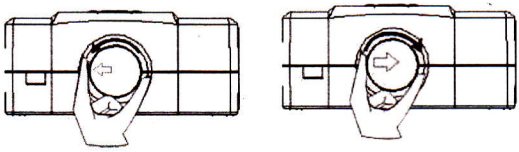
1. **Do not expose the remote control to shocks, liquid or high humidity. Do not expose it to direct sunlight or other intense light source when you operate.**
2. **Flip function can not used in USB input , please select other input to complete flip then back to USB input .**

▲Image trapezoid adjustment

The new projector, using it first time, commonly will appeared with image faintness and the image is trapezoid, it is course that not adjust well of the lens focus and the trapezoid. Following the step to adjust focus

▲Focus adjustment

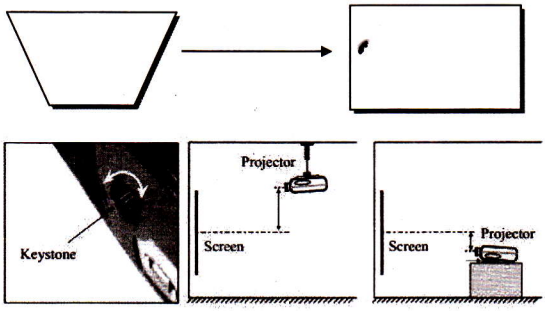
1、Turn the lens into the projector then turn it out slowly at the same time looking at the resolution point Carefully when the image is very clearly (take the middle area of the image),it is the best situation of the lens.



NOTE: When you replace the projector from a cold to a warm environment water vapour might occur. Don't turn the projector on when this occurs but wait until the vapour has disappeared.

▲Trapezoid adjustment

If a projected picture has keystone distortion, correct image with Keystone adjustment. The image becomes trapezoid shape when the screen or project is not level. Please reposition, the projector to improve its angle to the screen. However, the circumference of the image may not be focused.



If not able to use the Keystone correction function to correct the trapezoid distortion, please reduce of the projector to centre the screen vertically.

Menu setting

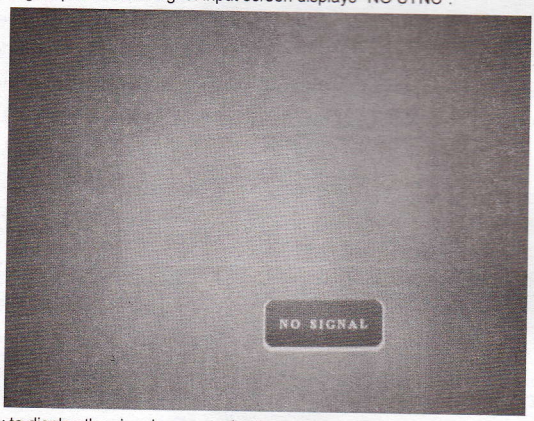
▲System function operation

Menu basic operation

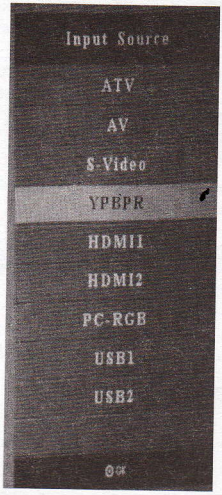
MENU key to display the main menu or return to superior menu, CH + / - key to move up and down options, V + / - keys to select or enter the option to move around.

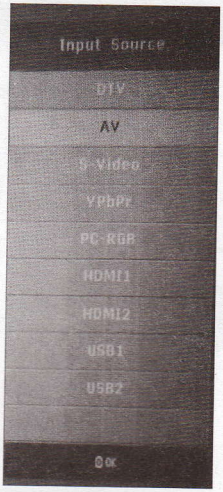
Source choice

When the selected signal path without signal input screen displays "NO SYNC":

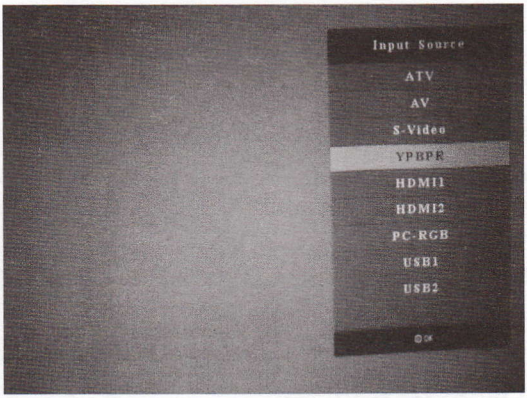


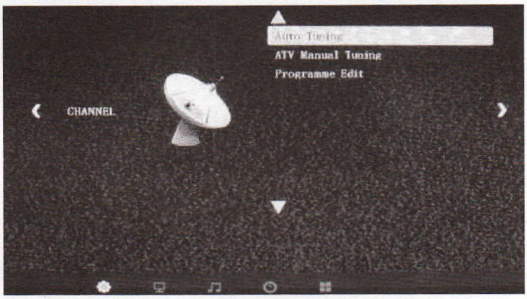
Press "Source" key to display the signal source selection menu:





CL312A CL312D





Function		
Channel	Auto Turning	
	Analog Manual Turning	
	Program Edit	Favorite, Skip, Delete, Move, Re-name

Picture Menu

▲Picture Mode Standard

You can adjust the picture display mode, according to personal preference settings, including standard, vivid, movies and user mode

▲Color Temperature Medium

User normal, cold color temperature, warm temperature

▲Aspect Ratio 16:9

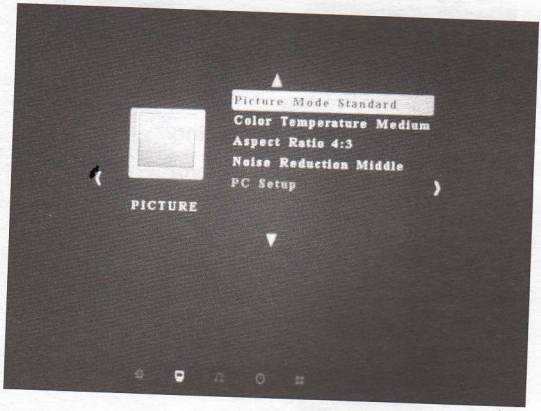
Includes eight screen zoom and 16:9 display

▲Noise Reduction Middle

Image background noise reduction

▲PC Setup

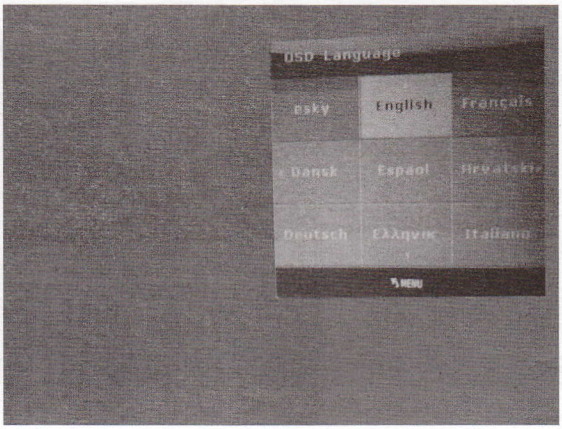
In VGA mode, picture mode only contrast and brightness can be adjust



▲Option Menu

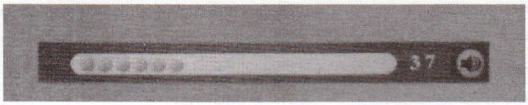
You can adjust the OSD language, transparency, menu display time.

Memory recall: the machine can be set back to factory settings

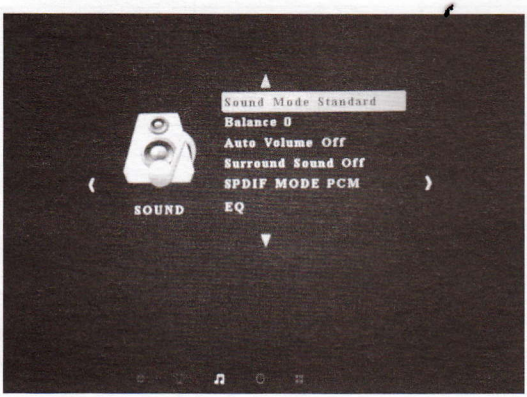


▲Audio Menu

When playing, press V + / - adjust the volume directly.



▲Sound Mode Standard



Select the sound playing mold

Balance

Left, right sound channel Equilibrium

Auto Volume Off

According ambient noise a just the Volume

Surround Sound Off

Sound accompaniment surround

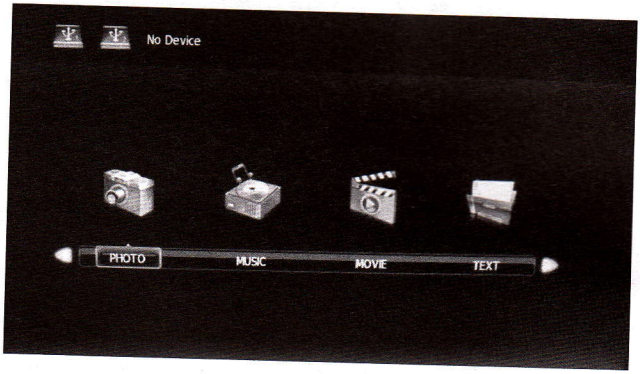
SPDIF MODE PCM

Sound accompaniment surround

EQ

Select the accompanying sound effect

▲USB Reader posts and support format



Document Category	Support document format	
Picture	JPEG,BMP,PNG	JPG/BMP/PNG
Video	MPEG1,MPEG2, MPEG4,H264,RM,RMVB,MOV, MJPEG,VC1,DIVX,FLV	.Avi/.mpg/.dar/.vob/.div/.mov/.mkv/.rm/.rmvb/.mp4/.mjpeg/.ts/.trp/.wmv/.asf/.flv
Audio	WMA ,MP3,M4A(AAC)	.wna/.mp3/.n4a

Parameter / File	Resolution	Compression Options	Support Range
JPEG	15360X8640	Progressive JPEG	Support 1024x768
		Baseline(*standard)	Support
		Baseline has been optimized	Support
BMP	9600X6400	Single Color	Support
		16 Colors	Support
		256 Colors	Support
		16Bit	Support
		24Bit	Support
		32Bit	Support
PNG	9600X6400	Non-Interlaced	Support
		Interlaced	Support 1200X800

Parameter File Type	Support the extension	Internal Code	Resolution	Baud Rate
MPEG1	.DAT/.MPG/.MPEG	/	1920X1080@30P	20Mbps
MPEG2	.MPG	/	1920X1080@30P	MAX to 20Mbps
MPEG4	.AVI/.MP4	DIVX.XVID	1920X1080@30P	MAX to 20Mbps
RM/RMVB	.RM/.RMVB	RV8.RV9.RV10	1280X720@30P	MAX to 10Mbps
H264	.MKV/.MOV	H.264	1920X1080@30P	MAX to 20Mbps
MUPEG	.AVI	/	640X480@30P	MAX to 10Mbps
DIVX	.DIVX/.AVI	MPEG.DIVX.H264	1920X1080@30P	MAX to 20Mbps
VC1	.WMV/.ASF	VC1	1920X1080@30P	MAX to 20Mbps
FLV	.FLV	H264	1920X1080@30P	MAX to 20Mbps

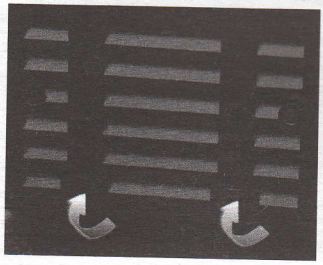
Parameter File Type	Sample rate	Baud rate	Sound channel
WMA	8K-48HZ	32K-320Kbps	Mono.stereo
MP3	32K-48HZ	32K-320Kbps	Mono.stereo
M4A(AAC)	8K-48HZ	32K-320Kbps	Mono.stereo

Maintenance

▲Maintenance filter

The filter should be cleaned at least once a month (more often in dusty enviroments), or the projector will overheat .the step as follow

1、Remove the screws and the grille like indicated below

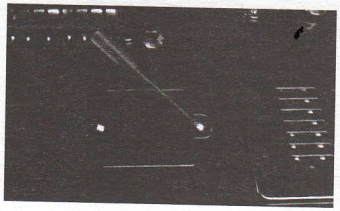


2、Clear the dusty on the filter. Dry the filter sufficiently, never install a moist filter in this projector, and complete the installation.

▲Cleaning of LCD panel

Unscrew the bolt showed in picture below, take out the cover, then do the cleaning of LCD with dry and soft cloth.

Warning: Faulty operation of this cleaning would possibly cause a fatal failure to the projector. Nonprofessionals are not allowed to do the LCD cleaning. For any failure caused owing to the LCD cleaning by the end users privately, the manufacturer reserves the right to refuse a service request.



Trouble Shooting

▲TROUBLE SHOOTING

Please refer to this chapter when you encounter a problem list prior to contacting your dealer.

Symptom	Possible Solution(s)
No power	1、Is the power cord properly connected? 2、Is the fuse broken?(If you don't where is the fuse, please refer to the Appearance instruction chapter.)
The lamp does not work when turning on the power	1、The lamp is broken or out of service life, please replace the lamp and test it again. 2、Is the power turned on and off frequently? Reset it for 15 minutes.
No Image	1、Have you open the lens cap at first? 2、Is the connecting correct? Make sure all the signal cords are correctly connected and select the correct input signal.
Remote control does not work	1、Are the batteries in the remote control used up? Are the batteries installed correctly? 2、Aim remote correct at the IR receiver(At the front of projector) 3、Projector turned on to quickly after last turn off(Need about 5 minutes)
Projector turns off automatically	1、Dust cover the filter, please wash this filter by water. 2、Some of fans are broken, do not turn again, It is high temperature protected system. Please replace the broken fans quickly.

The laptop choose VGA output example:

If have connected to the projector with laptop, you maybe need the keyboard or function setting to change destination of output. Please press the button "Fn", and press the button "F*" at the same time.(Here with such as the sign " " on the button)

VGA output choose example	
NEC	**Fn+F3**
SOTEC	
Panasonic	
Toshiba	**Fn+F5**
HP	**Fn+F4**
SONY	**Fn+F7**
LENOVO	
IBM	
Fujitsu	**Fn+F10**
DELL	**Fn+F8**

Specification

Technology :	TFT- Single LCD Panel + LED Technology
Resolution :	800*600, 1024*768, 720P, 1080P
True Brightness :	2200 Lumens
Contrast Ratio :	1000:1
Multimedia Interface :	2*HDMI(Support 1.1-1.4), 2*USB 2.0 (Support Hard Disk), VGA (PC), YPbPr, Composite A/V, Audio out(L/R) ,Analog TV **(DIGITAL TV for CL312D)**
Video Compatibility:	PAL/SECAM/NTSC
Television system:	PAL/NTSC BG/DK/I/MN **(for CL312A)**
USB Support :	2.0 High Speed input , support 1080P picture ,Video, Audio format
Speaker :	5W
Lamp :	60W LED lamp/bulb; 50000hours
Displayable Colors :	16.7 million, 24-bit RGB
Light uniformity :	90%
Projection Method :	Front, Rear, Ceiling Mount, Table Top
Image Zoom :	electronic horizontal and vertical flip; image zoom
Keystone Correction :	± 20° Vertical, Manual keystone correction
Throw Ratio :	50"@1.72m 72"@2.46m 100" @3.38m
Image Size (Diagonal) :	17"-180" (suggest 40"-100" best)
Aspect Ratio :	4:3 Native, 16:9 Compatible; Switch freely
OSD Language :	Total 23 languages (English, German, French, Spanish, Portuguese, Russian, Italian, Finnish ,Swedish ,Hungarian, Dutch, Norwegian, Danish, Greek, Croatian , Polish, Czech, Romanian, Slovene, Serbian, Janpanese, Simplified Chinese, Traditional Chinese) Can add any language as customer require
Noise Level (STD/Bright) :	<25db （Low noise）
Power Supply :	AC 90-240V, 50-60Hz
Projector case color	Black / White
Dimensions (L x W x H) :	300 x 240 x 100 mm
Carton Size :	380 x 290 x 185mm
Weight :	N.W :2.5KG , G.W :3.6KG; V.W.:5KG
Accessories :	User manual , Remote Control, Spare Fuse, Warranty card, Lens clean cloth, VGA Cable, Power Cable, three-color audio and video cable.
Warranty Period :	Projector 1-Year, Lamp 6 Months

Accessory and purchasable parts

When you open the carton of projector, please check the full accessories.

▲Accessory list:

Projector.....1unit

Remote control.....1pc

Power cable.....1pc

AV signal cable.....1pc

VGA signal cable.....1pc

Warranty card.....1pc

Manual.....1pc

Spare fuse.....1pc

Lens Clean Cloth.....1pc

▲Purchasable accessory

1、projector screen

2、projector ceiling mount

3、spare lamps